

## Claims

1. A method of transmitting service data between a first telecommunication device (10) and a second telecommunication device (18) of a telecommunication network (14), wherein

5           a central module generates prepaid access data, the prepaid access data comprising a first digital key and control data, and the prepaid access data being stored in a memory module (11) of the first telecommunication device (10),

10          the central module generating a second digital key, assigned to the first digital key, the second digital key being stored on one or more control units (16) of the telecommunication network (14),

15          the first telecommunication device (10) determines a validity criterion based on control data of the prepaid access data, and encodes service data of the first telecommunication device by means of the first key, as long as the validity criterion is fulfilled, and

20          the first telecommunication device (10) transmits encoded service data to the control unit (16), the control unit (16) checking by means of the second digital key that the encoded service data are encoded with the first digital key, upon successful check the control unit (16) decoding the encoded service data, and the control unit (16) transmitting the decoded service data to the second telecommunication device (18).

25          2. The method according to claim 1, wherein the prepaid access data stored in the memory module (11) of the first telecommunication device (10) are modified and/or deleted during the encoding of service data.

25          3. The method according to one of the claims 1 to 2, wherein the prepaid access data stored in the memory module (11) of the first telecommunication device (10) include a monetary amount value, this monetary

amount value being modified and/or deleted during the encoding of service data.

4. The method according to one of the claims 1 to 3, wherein the prepaid access data are stored on an SIM module (12) of the first 5 telecommunication device.
5. The method according to one of the claims 1 to 4, wherein the encoding of the service data includes a digital encryption und/or digital signature, and the decoding of the service data includes a corresponding digital decryption and/or verification of a digital signature.
- 10 6. The method according to one of the claims 1 to 5, wherein the prepaid access data include an authorization for the encoding of a definable quantity of service data, the prepaid access data being deleted as soon as the encoding of the definable amount of service data has been completed.
- 15 7. The method according to one of the claims 1 to 6, wherein a multiplicity of blocks with prepaid access data are storable in the memory module (11) of the first telecommunication device (10).
- 20 8. The method according to one of the claims 1 to 7, wherein the control data comprise a multiplicity of blocks, the determination of a validity criterion as well as the modification or deletion of the corresponding block of control data being feasible for each block.
- 25 9. A system for carrying out the method according to one of the claims 1 to 8, with a first telecommunication device (10), including an SIM module (12), with an MSC (Mobile Switching Center) (16) which is connectible to the first telecommunication device (10) via a telecommunication network (14), wherein

by means of a central module, prepaid access data with a first digital key and with control data are able to be generated as well as a corresponding second digital key,

prepaid access data are storable on the in a <sic.> memory module (11) of the SIM module (12) of the first telecommunication device (10),

the second digital key is storable in a memory module (24) of the MSC (16),

5 by means of the first telecommunication device (10) and prepaid access data stored in the memory module (11), validity criteria are able to be checked and service data of the first telecommunication device (10) are able to be encoded, and

10 encoded service data of the first telecommunication device (10) are able to be decoded by means of the MSC (16) and the second digital key stored in the memory module (24), and the decoded service data are able to be transmitted to a second telecommunication device (18).

10. The system according to claim 9, wherein the first telecommunication device (11) includes an encryption module or a signature module for encryption or signature of service data by means of the first digital key, and the MSC (16) comprises a decryption module or a signature verification module for decryption or verification of the signature of encrypted or signed service data by means of the second digital key.